

APPENDIX A
ABBREVIATIONS AND REFERENCES

APPENDIX A

LIST OF ABBREVIATIONS

ABAG	Association of Bay Area Governments
ac-ft	acre-feet
ac-ft/yr	acre-feet per year
Act	Urban Water Management Act
ALs	Action Levels
BMPs	Best Management Practices
BPS	Booster pump station
Cal Poly	California Polytechnic State University in San Luis Obispo
ccf	one hundred cubic feet
CCWD	Contra Costa Water Department
cfs	cubic feet per second
CPUC	California Public Utilities Commission
CSA	Customer Service Area
CUWCC	California Urban Water Conservation Council
DDSD	Delta Diablo Sanitation District
DHS	California Department of Health Services
DLR	detection levels for the purposes of reporting
DRU	Demographic Research Unit
DWR	California Department of Water Resources
EPA	U.S. Environmental Protection Agency
GAC	granulated activated carbon
gpd gal/d	gallons per day
gpm	gallons per minute
GWR	Groundwater Rule
IESWTR	Interim Enhanced Surface Water Treatment Rule
JPA	joint powers authority
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
mg	million gallons
mgd	million gallons per day
mg/l	Milligrams per liter
µg/l	micrograms per liter
MOU	Memorandum of Understanding Regarding Urban Water Conservation in California
NDMA	N-nitrosodimethylamine
PCAs	possible contaminating activities

LIST OF ABBREVIATIONS
(Continued)

pCi/l	pico-Curies per liter
Plan	Urban Water Management Plan
POU	Place of Use
Ppm	parts per million
Ppt	parts per trillion
Psi	pounds per square inch
SCADA	Supervisory Control and Data Acquisition
SCWC	Southern California Water Company
SWP	California State Water Project
TCE	trichloroethene
TDS	total dissolved solids
THMs	Trihalomethanes
WTP	Water Treatment Plant

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- Water Resource Associates. Technical Memorandum No. 1: City of Brentwood, Water Master Plan Update – Water Demands. May 2000.
- Western Regional Climate Center. Web-Site: Western U.S. Climate Historical Summaries, Climatological Data Summaries, (www.wrcc.dri.edu). 1999.
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APPENDIX B

**2005 URBAN WATER MANAGEMENT PLAN
“REVIEW FOR COMPLETENESS” FORM**

[illegible]

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Reference & Page Number

Reference & Page Number

1

[illegible]

1

5

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Table 2
Population - Current and Projected

Has management plan	Reference & Page Number
Attached management plan (b)(1)	Reference & Page Number
Description of basin(s) (b)(2)	Reference & Page Number
Basin is adjudicated	Reference & Page Number
If adjudicated, attached order or decree (b)(2)	Reference & Page Number
Quantified amount of legal pumping right (b)(2)	Reference & Page Number

Table 5	
Groundwater Pumping Rights - AF Year	
Basin Name	Pumping Right - AFY
Total	0

DWR identified, or projected to be, in overdraft	(b)(2)	Reference & Page Number
Plan to eliminate overdraft	(b)(2)	Reference & Page Number
Analysis of location, amount & sufficiency, last five years	(b)(3)	Reference & Page Number
Analysis of location & amount projected, 20 years	(b)(4)	Reference & Page Number

Basin Name(s)	2000	2001	2002	2003	2004
% of Total Water Supply					

Basin Name(s)	2010	2015	2020	2025	2030 - opt
% of Total Water Supply	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Reference & Page Number
Describes the reliability of the water supply and vulnerability to seasonal or climatic shortane

Table 8 Supply Reliability - AF Year					
Average / Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
% of Normal	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Table 9 Basis of Water Year Data			
Water Year Type	Source name	Source name	Source name
Average Water Year			
Single-Dry Water Year			
Multiple-Dry Water Years			

Reference & Page Number
Reference & Page Number
Reference & Page Number

Describe the reliability of the water supply due to seasonal or climatic shortages
Describe the vulnerability of the water supply to seasonal or climatic shortages
No unreliable sources

Reference & Page Number
Reference & Page Number
Reference & Page Number

Table 10 Factors resulting in inconsistency of supply				
Name of supply	Local	Environ-mental	Water Quality	Climatic

Describe plans to supplement or replace inconsistent sources with alternative sources or
No inconsistent sources

Reference & Page Number
Reference & Page Number

☐ Describe short term and long term exchange or transfer opportunities
☐ No transfer opportunities

Reference & Page Number
 Reference & Page Number

Table 11

Transfer and Exchange Opportunities - AF Year

Transfer Agency	Transfer of Exchange	Short term Quantities	Long term Quantities	Projected Quantities
Total			0	0

Quantify past water use by sector
 Quantify current water use by sector
 Project future water use by sector

4-2 Reference & Page Number
 4-2 Reference & Page Number
 4-2 Reference & Page Number

TABLE 12 - Past, Current and Projected Water Deliveries

	2000			2005		
	metered	unmetered	# of accounts	metered	unmetered	# of accounts
Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY
Single family						
Multi-family						
Commercial						
Industrial						
Institutional/gov						
Landscape						
Agriculture						
Other						
Total	0	0	0	0	0	0

TABLE 12 (continued) - Past, Current and Projected

	2015			2020		
	metered	unmetered	# of accounts	metered	unmetered	# of accounts
Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY
Single family						
Multi-family						
Commercial						

No non-implemented / not scheduled DMMs	Reference & Page Number
Cost-Benefit includes economic and non-economic factors (environmental, social, health, customer impact, and technological factors)	Reference & Page Number
Cost-Benefit analysis includes total benefits and total costs	Reference & Page Number
Identifies funding available for Projects with higher per-unit-cost than DMMs	Reference & Page Number
Identifies Suppliers legal authority to implement DMMs, efforts to implement the measures and efforts to identify cost share partners	Reference & Page Number

Table 16
Evaluation of unit cost of water resulting from non-implemented / non-scheduled DMMs and planned water supply project and programs

Non-implemented & Not Scheduled DMM / Planned Water Supply Project (Name)	Unit Cost (\$)

No future water supply projects or programs	Reference & Page Number
Detailed description of expected future supply projects & programs	Reference & Page Number
Timeline for each proposed project	Reference & Page Number
Quantification of each projects normal yield (AFY)	Reference & Page Number
Quantification of each projects single dry-year yield (AFY)	Reference & Page Number
Quantification of each projects multiple dry-year yield (AFY)	Reference & Page Number

Table 17
Future Water Supply Projects

Project Name	Project Start Date	Project End Date	Project Duration (Years)	Project Yield (AFY)	Project Yield (AFY)	Project Yield (AFY)	Project Yield (AFY)

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<input type="checkbox"/>	Describes opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term source
<input type="checkbox"/>	No opportunities for development of desalinated water

Table 18
Opportunities for desalinated water

Source of water	Check if yes
Ocean Water	
Brackish ocean water	
Brackish groundwater	
other	
other	

Urban suppliers that are California Urban Water Conservation Council members may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

The supplier's CUWCC Best Management Practices Report should be attached to the UWMMP.

<input type="checkbox"/>	Agency is a CUWCC member		Reference & Page Number
<input type="checkbox"/>	2003-04 annual updates are attached to plan		Reference & Page Number
<input type="checkbox"/>	Both annual updates are considered completed by CUWCC website		Reference & Page Number

Yes

<input type="checkbox"/>	Agency receives, or projects receiving, wholesale water		Reference & Page Number
<input type="checkbox"/>	Agency provided written demand projections to wholesaler, 20 years		Reference & Page Number

Table 19
Agency demand projections provided to wholesale suppliers - AFY

Wholesaler	2010	2015	2020	2025	2030 - opt
(name 1)					
(name 2)					
(name 3)					

<input type="checkbox"/>	Wholesaler provided written water availability projections, by source, to agency, 20 years (if agency served by more than one wholesaler, duplicate this table and provide the source availability for each wholesaler)		Reference & Page Number
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Table 20
Wholesaler identified & quantified the existing and planned sources of water- AFY

Wholesaler sources	2010	2015	2020	2025	2030 - opt

(source 1)						
(source 2)						
(source 3)						

Reliability of wholesale supply provided in writing by wholesale agency

(if agency served by more than one wholesaler, duplicate this table and provide the source availability for each wholesaler)

Reference & Page Number

Table 21

Wholesale Supply Reliability - % of normal AFY

Wholesaler sources	Single Dry	Year 1	Year 2	Year 3	Year 4
(source 1)					
(source 2)					
(source 3)					

Table 22

Factors resulting in inconsistency of wholesaler's supply

Name of supply	Logistics	Environment	Marketability	Climatic

Provide stages of action

Provide the water supply conditions for each stage

Includes plan for 50 percent supply shortage

Reference & Page Number

Reference & Page Number

Reference & Page Number

Table 23

Water Supply Shortage Stages and Conditions

RATIONING STAGES

Stage No.	Water Supply Conditions	% Shortage

Identifies driest 3-year period

Minimum water supply available by source for the next three years

Reference & Page Number
Reference & Page Number

Table 24
Three-Year Estimated Minimum Water Supply - AF Year

source**	Normal	Year 1	Year 2	Year 3
Total	0	0	0	0

*Note: If reporting after 2005, please change the column headers (Year 1, 2, & 3) to the appropriate years

Provided catastrophic supply interruption plan

Reference & Page Number

Table 25
Preparation Actions for a Catastrophe

	Check if Discussed
Regional power outage	
Earthquake	
Other (name event)	
Other (name event)	

List the mandatory prohibitions against specific water use practices during water shortages

Reference & Page Number

Table 26
Mandatory Prohibitions

Examples of Prohibitions	Source: When Prohibition Becomes Mandatory
Using potable water for street washing	
Other (name prohibition)	
Other (name prohibition)	

Other (name prohibition)	
Other (name prohibition)	
Other (name prohibition)	
Other (name prohibition)	

☐

List the consumption reduction methods the water supplier will use to reduce water use in the most restrictive stages with up to a 50% reduction.

Reference & Page Number

Table 27
 Consumption Reduction Methods

Consumption Reduction Methods	Water Use Take Effect	Water Use Reduction (%)
name method	2	25
name method	3	35
name method	4	50
name method	2, 3, 4	?
name method	3, 4	?
name method		

☐

List excessive use penalties or charges for excessive use

Reference & Page Number

Table 28
 Penalties and Charges

Penalties or Charges	Water Use Penalties/Charges Take Effect
Penalty for excessive use	
Charge for excessive use	
Other (name penalties or charges)	
Other (name penalties or charges)	
Other (name penalties or charges)	
Other (name penalties or charges)	
Other (name penalties or charges)	

Other (name penalties or charges)	
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Describe how actions and conditions impact revenues	Reference & Page Number
Describe how actions and conditions impact expenditures	Reference & Page Number
Describe measures to overcome the revenue and expenditure impacts	Reference & Page Number

Table 29

Proposed measures to overcome revenue impacts

Names of measures	Check if Discussed
Rate adjustment	
Development of reserves	
name of measure	
name of measure	

Table 30

Proposed measures to overcome expenditure impacts

Names of measures	Check if Discussed
name of measure	
name of measure	
name of measure	
name of measure	

Attach a copy of the draft water shortage contingency resolution or ordinance.	Reference & Page Number
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Provided mechanisms for determining actual reductions	Reference & Page Number
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Table 31

Water Use Monitoring Mechanisms

Mechanisms for determining actual reductions	Type Data Obtained (pop-up?)

Name mechanism	
Name mechanism	
Name mechanism	

☐ Describe the coordination of the recycling plan preparation information to the extent available.. _____ Reference & Page Number

Table 32
Participating agencies

Water agencies	participated
Wastewater agencies	
Groundwater agencies	
Planning Agencies	

☐ Describe the wastewater collection and treatment systems in the supplier's service area _____ Reference & Page Number

☐ Quantify the volume of wastewater collected and treated _____ Reference & Page Number

Table 33
Wastewater Collection and Treatment - AF Year

	2000	2005	2010	2015	2020	2025	2030 - opt
Wastewater collected & treated in service area	6,796						
Volume that meets recycled water standard	1,030						

☐ Describes methods of wastewater disposal _____ Reference & Page Number

☐ Describe the current type, place and use of recycled water _____ Reference & Page Number

☐ None _____ Reference & Page Number

☐ Describe and quantify potential uses of recycled water _____ Reference & Page Number

Table 34
Disposal of wastewater (non-recycled) AF Year

Method of disposal	2000	2005	2010	2015	2020	2025	2030 - opt

Wetlands	
Industrial	
Groundwater Recharge	
Other (user type)	
Other (user type)	
Total	0

Describe actions that might be taken to encourage recycled water uses
 Describe projected results of these actions in terms of acre-feet of recycled water used per year

Reference & Page Number
 Reference & Page Number

Table 38
 Methods to Encourage Recycled Water Use

Actions	2010	2015	2020	2025	2030 - opt
Financial incentives					
name of action					
name of action					
name of action					
name of action					
name of action					
name of action					
Total	0	0	0	0	0

Provide a recycled water use optimization plan which includes actions to facilitate the use of recycled water (dual distribution systems, promote recirculating uses)

Reference & Page Number

Table 39

Current & projected water supply changes due to water quality - percentage

Water Source	2005	2010	2015	2020	2025	2030 - opt

☐

Compare the projected normal water supply to projected normal water use over the next 20 years, in 5-year increments.

Reference & Page Number

Table 40
Projected Normal Water Supply - AF Year

Supply									
% of year 2005	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Table 41
Projected Normal Water Demand - AF Year

Demand									
% of year 2005	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Table 42
Projected Supply and Demand Comparison - AF Year

Supply totals									
Demand totals									
Difference									
Difference as % of Supply									
Difference as % of Demand									

☐

Compare the projected single-dry year water supply to projected single-dry year water use over the next 20 years, in 5-year increments.

Reference & Page Number

Table 43
Projected single dry year Water Supply - AF Year

	2010	2015	2020	2025	2030	2035	2040	2045	2050

Demand totals	0	0	0	0
Difference	0	0	0	0
Difference as % of Supply				
Difference as % of Demand				



Project a multiple-dry year period (as identified in Table 9) occurring between 2011-2015 and compare projected supply and demand during those years

Reference & Page Number

Table 49 Projected supply during multiple dry year period ending in 2015 - AF Year				
	2011	2012	2013	2015
Supply				
% of projected normal				

Table 50 Projected demand multiple dry year period ending in 2015 - AFY				
	2011	2012	2013	2015
Demand				
% of projected normal				

Table 51 Projected Supply and Demand Comparison during multiple dry year period ending in 2015- AF Year				
	2011	2012	2013	2015
Supply totals	0	0	0	0
Demand totals	0	0	0	0
Difference	0	0	0	0
Difference as % of Supply				
Difference as % of Demand				



Project a multiple-dry year period (as identified in Table 9) occurring between 2016-2020 and compare projected supply and demand during those years

Reference & Page Number

Table 52 Projected supply during multiple dry year period ending in 2020 - AF Year				
	2016	2017	2018	2020
Supply				
% of projected normal				

Table 53 Projected demand multiple dry year period ending in 2020 - AFY				
	2010	2017	2018	2020
Demand				
% of projected normal				

Table 54 Projected Supply and Demand Comparison during multiple dry year period ending in 2020- AF Year				
	2010	2017	2018	2020
Supply/normal	0	0	0	0
Demand/normal	0	0	0	0
Difference	0	0	0	0
Difference as % of Supply				
Difference as % of Demand				

Project a multiple-dry year period (as identified in Table 9) occurring between 2021-2025 and compare projected supply and demand during those years



Reference & Page Number

Table 55 Projected supply during multiple dry year period ending in 2025 - AF Year				
	2021	2022	2023	2025
Supply				
% of projected normal				

Table 56 Projected demand multiple dry year period ending in 2025 - AFY				
	2021	2022	2023	2025
Demand				
% of projected normal				

Table 57 Projected Supply and Demand Comparison during multiple dry year period ending in 2025- AF Year				
	2021	2022	2023	2025
Supply/normal	0	0	0	0
Demand/normal	0	0	0	0
Difference	0	0	0	0
Difference as % of Supply				
Difference as % of Demand				

☐ Provided Water Service Reliability section of UWMP to cities and counties within which it provides water supplies within 60 days of UWMP submission to DWR _____ Reference & Page Number _____

<input type="checkbox"/>	Attach a copy of adoption resolution	_____	Reference & Page Number
<input type="checkbox"/>	Encourage involvement of social, cultural & economic community groups	_____	Reference & Page Number
<input type="checkbox"/>	Plan available for public inspection	_____	Reference & Page Number
<input type="checkbox"/>	Provide proof of public hearing	_____	Reference & Page Number
<input type="checkbox"/>	Provided meeting notice to local governments	_____	Reference & Page Number

☐ Reviewed implementation plan and schedule of 2000 UWMP
Implemented in accordance with the schedule set forth in plan
2000 UWMP not required

<input type="checkbox"/>	_____	Reference & Page Number
<input type="checkbox"/>	_____	Reference & Page Number
<input type="checkbox"/>	_____	Reference & Page Number

☐ Provide 2005 UWMP to DWR, and cities and counties within 30 days of adoption _____ Reference & Page Number _____

☐ Does UWMP or correspondence accompanying it show where it is available for public review _____ Reference & Page Number _____

APPENDIX C

RESOLUTION TO ADOPT THE URBAN WATER MANAGEMENT PLAN

CITY COUNCIL AGENDA ITEM NO. _____

Meeting Date: January 10, 2006

Subject/Title: Adoption of the 2005 Urban Water Management Plan as submitted by Brown and Caldwell, Environmental Engineers and Consultants.

Prepared by: Chris Ehlers, Water Operations Manager
Diana Williford, Water Reclamation Specialist

Submitted by: Paul Zolfarelli, Director of Public Works

RECOMMENDATION

Approve a Resolution adopting the 2005 Urban Water Management Plan (UWMP) as submitted by Brown and Caldwell, Environmental Engineers and Consultants.

PREVIOUS ACTION

On October 24, 2000, by Resolution No. 2179, City Council authorized the City Manager to sign an agreement with Brown and Caldwell for the preparation of the Urban Water Management Plan.

On August 14, 2001, by Resolution No. 2341, City Council adopted the 2000 Urban Water Management Plan as prepared by Brown and Caldwell.

On February 24, 2004, by Resolution No. 2004-40, City Council approved the amended Purchasing Policy.

On June 14, 2005, by Resolution No. 2005-143, City Council adopted the 2005/06 – 2006/07 Operating Budget for the City of Brentwood.

BACKGROUND

On August 10, 2005 the City of Brentwood signed a Professional Services Agreement with Brown and Caldwell to prepare the 2005 Urban Water Management Plan in an amount not to exceed \$24,900 without prior authorization. This professional services agreement is in compliance with Purchasing Policy 10-7, 6.8. This Water Management Plan addresses the City of Brentwood water system, which in 2004 provided approximately 2,947 million gallons of water to 13,763 connections in Brentwood via 172 miles of distribution mains. In 2004, approximately 58 percent of the water in the system was supplied from groundwater (wells) with the remainder purchased from Contra Costa Water District.

This plan serves as the 2005 UWMP as required by the Urban Water Management Planning Act (Act). It provides the analysis of water conservation measures in accordance with the guidelines of the California Urban Water Conservation Council and it serves as the long-term water supply plan for the City of Brentwood water system.

The Act requires the encouragement of public participation and a public hearing regarding the Water Management Plan. This hearing provides an opportunity for the City's residents to learn about water supply and plans for providing a reliable, safe, high-quality water for the future. The

hearing also allows the public to ask questions regarding the current water supply and the viability of future plans. This plan is required by the Act to be updated every five years. City Council adopted the 2000 UWMP in August of 2001.

The State Water Resources Control Board requires water suppliers to review historic and projected demand and supply balances, consider alternative supply sources, and provide detailed information about demand management or water conservation. The UWMP must outline drought contingency plans for times of water shortage and is also required for land use planning purposes. According to the Act, the purpose of the plan is to help local agencies "achieve conservation and efficient use" of the State's water resources.

Upon adoption by City Council, the Plan will be submitted to the Department of Water Resources (DWR) State Water Resources Control Board. The Board has a one year period to review and comment on the Plan. If the Board has recommended changes the Plan will be resubmitted to Council for adoption of the changes.

FISCAL IMPACT

The cost to prepare the 2005 Urban Water Management Plan is \$24,900. These funds were budgeted in the 2005/06 Fiscal Year through the Water Enterprise and approved by Council by the adoption of the 2005/06 – 2006/07 Operating Budget. This is a one-time cost for the preparation of this plan and will not require additional resources. The submittal of the UWMP ensures compliance with the State Water Resources Control Board, Clean Water Division, State Revolving Fund loan. The City's Wastewater Treatment Plant is funded through the State Revolving Fund loan.

Attachments:

- Resolution
- 2005 Urban Water Management Plan

RESOLUTION NO.

ADOPTION OF THE 2005 URBAN WATER MANAGEMENT PLAN AS SUBMITTED BY BROWN AND CALDWELL, ENVIRONMENTAL ENGINEERS AND CONSULTANTS.

WHEREAS, the State Urban Water Management Planning Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers to adopt and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources every five years; and

WHEREAS, the City of Brentwood is an urban water supplier providing water for municipal purposes to more than 13,763 customers; and

WHEREAS, on October 24, 2000, by Resolution No. 2179, City Council authorized the City Manager to sign an agreement with Brown and Caldwell for the preparation of the 2000 Urban Water Management Plan; and

WHEREAS, on August 14, 2001, by Resolution No. 2341, the City Council adopted the 2000 Urban Water Management Plan as prepared by Brown and Caldwell; and

WHEREAS, on February 24, 2004, by Resolution No. 2004-40, City Council approved the amended Purchasing Policy; and

WHEREAS, on June 14, 2005, by Resolution No. 2005-143, City Council adopted the 2005/06 – 2006/07 Operating Budget for the City of Brentwood; and

WHEREAS, the funds for the preparation of the 2005 UWMP were budgeted in the 2005/06 Fiscal Year; and

WHEREAS, on August 10, 2005 the City of Brentwood signed a Professional Services Agreement with Brown and Caldwell to prepare the 2005 UWMP; and

WHEREAS, the City of Brentwood has prepared the 2005 UWMP, a copy of which is on file with the City Clerk, made it available for public review, and has held the appropriate public hearing.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Brentwood that the 2005 UWMP is hereby adopted.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Brentwood at a regular meeting held on the 10th day of January 2006 by the following vote:


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City Council Voting Log 2006 1st Quarter

January 10, 2006					
Subject	Beckstrand	Brockman	Gutierrez	Swisher	Taylor
Legend: Y=Yes N=No A=Absent Absn=Abstain					
1. Approved minutes of the City Council/Redevelopment Agency meeting held December 13, 2005. (M. Wimberly)	Y	Y	Y	Absn	Y
2. Approved extension of Brentwood Agency's Project Area Committee to July 9, 2006. (H. Sword/G. Rozenski)	Y	Y	Y	Y	Y
3. Waived second reading and adopted Ordinance 819 amending the conditionally permitted uses in Subarea "A" of Planned Development-56, Sunset Industrial Park. (H. Sword/J. Zilm)	Y	Absn	Y	Y	Y
4. Adopted Resolution 2006-3 accepting the Second Annual Residential Growth Management Program Allocation Recommendation as submitted by the RGMP Allocation Recommendation Committee for the calendar year 2006. (P. Ehler/H. Sword/B. Grewal)	Y	Y	Y	Y	Y
5. Approved reappointments of Saunie Fridley, Sandra Gill, and Patrick McCarran to the Arts Commission. (C. Bronzan/R. Burr-Siegel)	Y	Y	Y	Y	Y
6. Adopted Resolution 2006-4 approving, and authorizing the City Manager to execute, an agreement with In-Shape Health Clubs, Inc. to affect additional wellness benefits for City employees at their own expense (D. Landeros)	Y	Y	Y	Y	Y
7. Set the date of January 24, 2006, for the appeal of a Conditional Use Permit No. 05-22 (Living Water Ministries Residential Home). (H. Sword/J. Strandberg)	Y	Y	Y	Y	Y
8. Rejected the claim presented by Robert Graham. (K. Chew)	Y	Y	Y	Y	Y
9. Adopted Resolution 2006-5 amending Council Policy 30-1, Appointment of Planning Commission Members. (H. Sword/M. Wimberly)	Y	Y	Y	Y	Y
10. Redevelopment Agency - Approved Warrant list dated January 10, 2006. (P. Ehler/L. Schelbert)	Y	Y	Y	Y	Y
11. Consideration of an appeal of a Planning Commission decision denying General Plan Amendment No. 01-01 and Rezone No. 05-04 for the Bridle Gate project, located west of the State Route 4 Bypass, on both sides of the Sand Creek Road extension. Council Action - Option 3 - continue the matter at the January 10, 2006, meeting and direct staff to return the appeal and revisions at a subsequent meeting to allow staff to make those changes for the City Council's review	Y		Y	Y	Y
12. Adopted Resolution 2006-6 adopting the 2005 Urban Water Management Plan as submitted by Brown and Caldwell, Environmental Engineers and Consultants. (P. Zolfarelli/C. Ehlers/D. Willford)	Y	Y	Y	Y	Y
13. No Action Required - Consideration of a Resolution amending the City of Brentwood Cost Allocation Plan and Schedule of City Fees to include a Traffic Signal Maintenance and Operation Fee. The Item was removed from the agenda, if it is brought back for Council consideration, it will be re-noticed					
14. Reviewed the status of the emergency clean-up of Marsh Creek and determined the need to continue activities.	Y	Y	Y	Y	Y

RESOLUTION NO. 2005-008**ADOPTION OF THE 2005 URBAN WATER MANAGEMENT PLAN AS SUBMITTED BY BROWN AND CALDWELL, ENVIRONMENTAL ENGINEERS AND CONSULTANTS.**

WHEREAS, the State Urban Water Management Planning Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers to adopt and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources every five years; and

WHEREAS, the City of Brentwood is an urban water supplier providing water for municipal purposes to more than 13,783 customers; and

WHEREAS, on October 24, 2000, by Resolution No. 2179, City Council authorized the City Manager to sign an agreement with Brown and Caldwell for the preparation of the 2000 Urban Water Management Plan; and

WHEREAS, on August 14, 2001, by Resolution No. 2341, the City Council adopted the 2000 Urban Water Management Plan as prepared by Brown and Caldwell; and

WHEREAS, on February 24, 2004, by Resolution No. 2004-40, City Council approved the amended Purchasing Policy; and

WHEREAS, on June 14, 2005, by Resolution No. 2005-143, City Council adopted the 2005/06 - 2006/07 Operating Budget for the City of Brentwood; and

WHEREAS, the funds for the preparation of the 2005 UWMP were budgeted in the 2005/06 Fiscal Year; and

WHEREAS, on August 10, 2005 the City of Brentwood signed a Professional Services Agreement with Brown and Caldwell to prepare the 2005 UWMP; and

WHEREAS, the City of Brentwood has prepared the 2005 UWMP, a copy of which is on file with the City Clerk, made it available for public review, and has held the appropriate public hearing.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Brentwood that the 2005 UWMP is hereby adopted.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Brentwood at a regular meeting held on the 10th day of January 2006 by the following vote:

AYES:	Beckstrand, Brockman, Gutierrez, Swisher, Taylor
NOES:	None
ABSENT:	None
ABSTAIN:	None


 Brian Swisher
 Mayor

2006-006

2 of 2

ATTEST:


Margaret Wimbary, CMC
City Clerk

APPENDIX D
CALIFORNIA WATER CODE

WATER CODE

SECTION 10610-10610.4

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

WATER CODE

SECTION 10611-10617

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

WATER CODE

SECTION 10620-10621

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

WATER CODE

SECTION 10630-10634

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.

(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree.

For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

(1) An average water year.

(2) A single dry water year.

(3) Multiple dry water years.

For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

(A) Water survey programs for single-family residential and multifamily residential customers.

(B) Residential plumbing retrofit.

(C) System water audits, leak detection, and repair.

(D) Metering with commodity rates for all new connections and retrofit of existing connections.

(E) Large landscape conservation programs and incentives.

(F) High-efficiency washing machine rebate programs.

(G) Public information programs.

(H) School education programs.

(I) Conservation programs for commercial, industrial, and institutional accounts.

(J) Wholesale agency programs.

(K) Conservation pricing.

(L) Water conservation coordinator.

(M) Water waste prohibition.

(N) Residential ultra-low-flush toilet replacement programs.

(2) A schedule of implementation for all water demand management measures proposed or described in the plan.

(3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.

(4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the

savings on the supplier's ability to further reduce demand.

(g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:

(1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.

(2) Include a cost-benefit analysis, identifying total benefits and total costs.

(3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.

(4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.

(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

(j) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

(k) Urban water suppliers that rely upon a wholesale agency for a source of water, shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

10631.5. The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities.

10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:

- (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

- (b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

- (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

- (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

- (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

- (f) Penalties or charges for excessive use, where applicable.

- (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

- (h) A draft water shortage contingency resolution or ordinance.

- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise

available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

WATER CODE

SECTION 10635

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

WATER CODE

SECTION 10640-10645

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630).

The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the outstanding elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

WATER CODE

SECTION 10650-10657

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified

in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

10657. (a) The department shall take into consideration whether the urban water supplier has submitted an updated urban water management plan that is consistent with Section 10631, as amended by the act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department.

(b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.

APPENDIX E
WATER SHORTAGE CONTINGENCY PLAN

APPENDIX E
WATER SHORTAGE CONTINGENCY PLAN

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Attachments

- 1. Water Quality Emergency Notification Plan (Appendix F)
- 2. Municipal Code 17.630 (Appendix G)

This document is a Water Shortage Contingency Plan for the City of Brentwood (City) water system. The purpose of this contingency plan is to provide a plan of action to be followed at the various stages of a water shortage.

Section 1. Water Supply Shortage Stages and Conditions

This section describes the stages of action to be undertaken in response to water supply shortages. Included is an outline of specific water supply conditions that are applicable to each stage. Per California Water Code Section 10632 (a), the City has developed four stages of action to be undertaken in response to water supply shortages, including up to a 50 percent reduction in water supply and an outline of specific water supply conditions which are applicable to each stage.

Four stages of action to be taken during a water supply shortage have been developed. The stages will be implemented during water supply shortages according to shortage level, ranging from 5 percent shortage in Stage I to 50 percent shortage in Stage IV. The stage determination and declaration during a water supply shortage will be made by the Public Works Director. Table 1 describes the water supply shortage levels and stages.

Table 1. Water Supply Shortage Stages

Shortage	Stage	Demand Reduction Goal	Type of Program
Minimum 5-10 percent	I	10 percent	Voluntary
Moderate 10-20 percent	II	20 percent	Mandatory Conservation Phase - Voluntary Allotments and/or Mandatory Conservation Rules
Severe 20-35 percent	III	35 percent	Rationing Phase - Allotments and Mandatory Conservation Rules
Critical 35-50 percent	IV	50 percent	Intense Rationing Phase - Allotments and Mandatory Conservation and Rules

During Stage I, water alert conditions are declared and voluntary conservation is encouraged. The City maintains an ongoing public information campaign consisting of distribution of literature, speaking engagements, bill inserts, and conversation messages printed in local newspapers and on the City's internet web page. The drought situation is explained to public and governmental bodies. The City explains other stages and forecast future actions. Also, the City requests voluntary water conservation. Educational programs in area schools are ongoing.

During Stage II of a water supply shortage, the shortage is moderate, 10 to 20 percent, and conservation may be voluntary, consist of allotments, and or include mandatory conservation rules. The severity of actions depends upon the percent shortage. The City aggressively continues its public information and education programs. The City asks for 10 to 20 percent voluntary or mandatory water use reductions. If necessary, the City also supports passage of drought ordinances.

During Stage III of a water supply shortage, the shortage is severe, 20 to 35 percent, and conservation consists of allotments and mandatory conservation rules. This phase becomes effective upon notification by the City that water usage is to be reduced by a mandatory percentage. The City would adopt drought ordinances and implements mandatory reductions. Rate changes are implemented to penalize excess usage.

Water use restriction is put into effect; i.e., prohibited uses can include restrictions on daytime hours for watering, excessive watering resulting in gutter flooding, using hoses without a shutoff device, non-recycling fountains, washing down sidewalks or patios, unrepaired leaks, etc. The City monitors production weekly for compliance with necessary reductions. As a result of a customer consistently abusing use, the City would install a flow restrictor at the water meter.

During Stage IV of a water supply shortage, the shortage is critical, 35 to 50 percent. Conservation consists of allotments and mandatory conservation rules. All steps taken in prior stages are intensified and production is monitored daily for compliance with necessary reductions.

Section 2. Prohibitions

California Water Code Section 10632 (d) requires mandatory prohibitions against specific water use practices that may be considered excessive during water shortages. Since 1992, the City has adopted Municipal Code 17.630, which addresses landscaping and irrigation for new construction of homes, commercial and industrial facilities. This code is included in Appendix F. It requires 90 percent of the plants selected in non-turf areas to be well suited to the climate of Brentwood and require minimal water once established. Up to 10 percent of the plants may be of a non-drought-tolerant nature but must be grouped together and irrigated separately from the drought-tolerant plants. Turf is not allowed on City median strips, in areas less than 8 feet wide and on slopes greater than 4:1. Soil conditioning, irrigation systems and sprinkler heads are all addressed in this ordinance. The landscaping shall be inspected and must be issued a certificate of substantial completion that is submitted to the City. This code is a proactive means of reducing the water demand in the City of Brentwood.

Should drought conditions warrant mandatory reductions, during Stage II of a water supply shortage, the City may adopt and implement an ordinance for mandatory conservation and water restriction plan. This code may require additional tariffs for the City to enforce the plan.

The code may address prohibitions on various wasteful water uses, including, but not limited to, the hose washing of sidewalks and driveways using potable water, cleaning or filling decorative fountains, and allowing plumbing leaks to go uncorrected for more than 72 hours. Table 2 identifies potential prohibitions and the stages during which the prohibition would be voluntary and mandatory.

Table 2. Voluntary and Mandatory Prohibitions

Prohibitions	Stage When Prohibition is Voluntarily Requested	Stage When Prohibition Becomes Mandatory
Cleaning of Streets/sidewalks/walkways/parking areas/patios/porches or verandas	I	II, III, IV
Washing cars	I	II, III, IV
Watering lawns/landscapes	I	II, III, IV
Non-permanent agriculture	I	II, III, IV
Uncorrected plumbing leaks	I	II, III, IV
Gutter flooding	I	II, III, IV
Cleaning/filling/operating/maintaining levels in non-recycling decorative fountains	I	II, III, IV

Section 3. Consumption Reduction Methods

Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply. California Water Code Section 10632 (e) requires the water supplier to provide consumption reduction methods in the most restrictive stages of a water shortage. The City will use the consumption reduction methods proposed in Table 3.

Table 3. Consumption Reduction Methods

Examples of Consumption Reduction Methods	Stage When Method Takes Effect
Demand reduction program	All Stages
Reduce pressure in water lines	
Flow restriction	III, IV
Restrict Building permits	
Restrict for only priority uses	II, III, IV
Use prohibitions	II, III, IV
Water shortage pricing	
Per capita allotment by customer type	III, IV
Plumbing fixture replacement	All Stages
Voluntary rationing	II
Mandatory rationing	III, IV
Incentives to reduce water consumption	
Excess use penalty	III, IV
Water conservation kits	All Stages
Education Program	All Stages
Percentage reduction by customer type	III, IV

Section 4. Reduction Measuring Mechanism

California Water Code Section 10632 (i) requires the water supplier to develop a mechanism for determining actual reductions in water use in the course of carrying out the urban water supply shortage contingency analysis.

Under normal water supply conditions, water production figures are recorded daily within and monitored by the Superintendent during normal water supply conditions. Totals are reported monthly and are incorporated into water supply reports.

The City maintains extensive water use records on individual customer accounts. Exceptionally high usage is identified at meter reading time by the City's electronic meter reading management system. These accounts are investigated for potential water loss or abuse problems.

During all stages of water shortages, daily production figures are reported to and monitored by the Superintendent daily.

Section 5. Penalties or Charges for Excessive Use

Section 10632 (f) of the California Water Code requires a water supplier to penalize or charge for excessive water use, where applicable. The City, after one written warning, shall install a flow-restricting device on the service line of any customer observed by City personnel to be using water for any non-essential or unauthorized use defined in a City ordinance.

An excess use penalty per 100 cubic feet of water used in excess of the applicable allocation during each billing period shall be charged by the City for all service rendered on and after the effective date of an ordinance. Repeated violations of unauthorized water use will result in discontinuance of water service. Penalties and charges and the stage during which they take effect are displayed in Table 4.

Table 4. Penalties and Charges

Examples of Penalties and Charges	Stage When Penalty Takes Effect
Penalties for not reducing consumption	III, IV
Charges for excess use	III, IV
Flat fine	
Charge per unit over allotment	III, IV
Flow restriction	III, IV
Termination of Service	III, IV

Section 6. Worst-Case Scenarios

California Water Code Section 10632 (b) requires an estimate of the minimum water supply availability during each of the next 3 water years based on the driest 3 -year historic sequence for the agency's water supply. Refer to Chapter 3 of the Year 2005 Urban Water Management Plan for this analysis.

Section 7. Preparation for Catastrophic Water Supply Interruption

The Water Code Section 10632 (c) requires actions to be undertaken by the water supplier to prepare for and implement during a catastrophic interruption of water supplies. The City has a Water Quality Emergency Notification Plan in place that coordinates overall response to a disaster. This plan is included as Appendix F.

A catastrophic event that constitutes a proclamation of a water shortage would be any event, either natural or manmade, that causes a severe shortage of water, synonymous with or with greater severity than the Stage III or Stage IV water supply shortage conditions. Facilities are inspected annually for earthquake safety. Auxiliary generators and improvements to the water storage facilities to prevent loss of these facilities during an earthquake or any disaster causing an electric power outage have been budgeted for and installed as part of the annual construction process.

Table 5 is a summary of items discussed regarding the preparation actions for a catastrophe.

Table 5. Preparation Actions for a Catastrophe

Examples of Penalties and Charges	Check if Discussed
Determine what constitutes a proclamation of a water shortage.	X
Stretch existing water storage.	
Obtain additional water supplies.	
Determine where the funding will come from.	X
Contact and coordinate with other agencies.	X
Create an Emergency Response Team/Coordinator.	X
Create a catastrophe preparedness plan.	X
Put employees/contractors on-call.	X
Develop methods to communicate with the public.	X
Develop methods to prepare for water quality interruptions.	X

Section 8. Analysis of Revenue and Expenditure Impacts

Section 10632 (g) of the California Water Code requires an analysis of the impacts of each of the actions taken for conservation and water restriction on the revenues and expenditures of the water supplier. The City will establish memorandum accounts to track expenses and revenue shortfalls caused by both mandatory rationing and voluntary conservation efforts. The City will implement a surcharge to recover revenue shortfalls recorded in their drought memorandum accounts.

Tables 6 and 7 display the Components of Revenue and Expenditure Impacts and summarize if the various components were discussed.

Table 6. Components of Revenue Impact Description

Components	Check if Discussed
Review of rate adjustment	X
Development of reserves	X
Change in quantity of sales	X
Impact on Customer's bill	X
Distribution of customer impacts between customer types	X
Impacts to water supplier of higher rates and penalties	X
Cost recovery reviews	X

Table 7. Components of Expenditure Impact Description

Components	Check if Discussed
Change in quantity of sales	X
Cost recovery reviews	X
Increased staff salaries/overtime	X
Increased costs of new supplies, transfers or exchanges	X
Distribution of customer impacts between customer types	X
Impacts to water supplier of higher rates and penalties	X